National Conference on Innovations in Pharmacy and Practice

Dr.Ampati Srinivas
Mr.I.Rajeev
Mr.Md.Ismail

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Editors

Dr.Ampati Srinivas
Mr.I.Rajeev
Mr.Md.Ismail

TITLE : National Conference on Innovations in Pharmacy
and Practice

E-ISBN : 978-93-945102-9-6

Editors : Dr.Ampati Srinivas, Mr.I.Rajeev, Mr.Md.Ismail

Price : 149/- INR

Published by : Cape Comorin Publisher
Kanyakumari, Tamilnadu, India

Website : www. capecomorinpublisher.com

Imprint at : Cape Comorin Publisher
Kanyakumari, Tamil Nadu, India

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Unity College of Pharmacy, Raigir, Bhongir, Yadadhri Bhuvanagiri, TS, India

1. GREEN BLOOD THERAPY

B ARUNA, ANNAPURNA, AKHILA, CHANDHANA, AND S AMARNATH*
Unity college of Pharmacy,
Raigir (V), Bhongir (M), YadadriBhuvanagiri (Dist), Telangana - 508116

Abstract

Juice of wheat (Triticum aestivum L., Poaceae) grass is termed as green blood. Wheatgrass is a variety of grass that is used like a herbal medicine for its therapeutic and nutritional properties. The aim of this study is to concise the health benefits of green blood therapy

2. PLASTIC POLLUTION

B ARUNA, ANNAPURNA, AKHILA, CHANDHANA, AND S AMARNATH*
Unity college of Pharmacy,
Raigir (V), Bhongir (M), YadadriBhuvanagiri (Dist), Telangana - 508116

Abstract

Plastic pollution is a growing threat to the world's oceans, as well as our food, health and climate. Plastic pollution permeates every corner of our world and now is cemented in our fossil record. As plastics continue to flood into our oceans, the list of marine species affected by plastic debris expands.

3. ARTIFICIAL MEAT

B ARUNA, ANNAPURNA, AKHILA, CHANDHANA, AND S AMARNATH*
Unity college of Pharmacy,
Raigir (V), Bhongir (M), YadadriBhuvanagiri (Dist), Telangana - 508116

Abstract

Cultured meat involves producing meat from animal cells, not from slaughtered animals. This innovation has the potential to revolutionize the meat industry, with wide implications for the environment, health and animal welfare.

4. LYMPHATIC SYSTEM AND THEIR DISORDERS

TAJHEEN,SUJATHA,M.NANDINI*
UNITY COLLEGE OF PHARMACY, RAIGIR, YADADRI BHONGIR , TS

ABSTRACT:

Lymphatic System

lymphatic system, part of your immune system, it has many functions. They include protecting your body from illness-causing invaders, maintaining body fluid levels, absorbing digestive tract fats and removing cellular waste. Blockages, diseases or infections can affect your lymphatic system’s function

The lymphatic system is a network of tissues, vessels and organs that work together to move lymph back into your your bloodstream. The lymphatic system is part of your immune system

5. STRATEGIES IN PHARMACEUTICAL MARKETING

G.Sahithi, Ampati Srinivas*
Unity College of Pharmacy, Ragir, Bhongir, Yadadhri Bhuvanagiri, TS

ABSTRACT

The main objective of ethical criteria for medicinal drug promotion is to support and encourage the improvement of health care through the rational use of medicinal drugs. WHO expanded its scope to people in all walks of life: governments; the pharmaceutical industry (manufacturers and distributors); the promotion industry (advertising agencies, market research organizations and the like); health personnel involved in the prescription, dispensing, supply and distribution of drugs; universities and other teaching institutions; professional associations; patients and consumer groups; and the professional and general media including publishers and editors of medical journals and related publication of the drug itself.According to WHO, Promotional materials for pharmaceutical products should be accurate, fair and objective and presented in such a way as to confirm not only to legal requirements but also to high ethical standards .

6. Development and Validation of RP-HPLC Method for Simultaneous Estimation of Levofloxacin Andambroxol Hydrochloride in Bulk and Pharmaceutical Dosage Form

M.Nandini, Ampati Srinivas*
Unity College of Pharmacy, Ragir, Bhongir, Yadadhri Bhuvanagiri, TS

ABSTRACT

A new, precise, rapid, accurate RP-HPLC method was developed for the Simultaneous Estimation of Levofloxacin and Ambroxol HCl in pharmaceutical dosage forms. After optimization the good chromatographic separation was achieved by Isocratic mode with a Mixed phosphate buffer: ACN: methanol (40:40:20v/v%) pH4.5.as the mobile phase with Inertsil ODS C18-250X4.6mm, 5µ,column as stationary phase at flow rate of 1 mL/min and detection wavelength of 223nm.The retention times for Levofloxacin and Ambroxol HCl found to be 2.737min and 4.793min respectively. The linearity of this method was found in the concentration range of 60 µg/mL to 140 µg/mL for Levofloxacin and 9-21 (µg/mL)for Ambroxol HCl. The correlation coefficient *R2*value is found to be0.997 for Levofloxacin and 0.995 for Ambroxol HCl. The LOD and LOQ for Levofloxacin were found to be 2.66 mcg µg/mL and 15.69 µg/mL respectively. The LOD and LOQ for Ambroxol HCl were found to be 8.05 µg/mL and 47.55µg/mL respectively. This method was found to be good percentage recovery for Levofloxacin AndAmbroxol HCl were found to be 101.28 and 99.32 respectively indicates that

the proposed method is highly accurate. The specificity of the method shows good correlation between retention times of standard with the sample so, the method specifically determines the analyte in the sample without interference from excipients of tablet dosage form.
The method was extensively validated according to ICH guidelines for Linearity, Range, Accuracy, Precision, specificity and Robustness.
Keywords: UV spectrophotometer, Levofloxacin and Ambroxol HCl, High performance liquid chromatography.

7. Design and Characterization of Mouth Dissolving Tablets of Zolmitriptan Using Novel Super Disintegrants

A.Priyanka, Md.Ismail*

ABSTRACT

The present study was carried out on Zolmitriptan Mouth dissolving tablets were prepared by different concentration super disintegrants like croscarmellose sodium, polyplasdone XL and Explotab were used in mouth dissolving tablets. A total of 9 formulations were prepared and evaluated for various pre and post compression parameters like angle of repose, bulk density, tapped density, carr's index, hausner's ratio, weight variation, hardness, friability, thickness, wetting time, water absorption ratio disintegration time of the optimized formulation (F4) of Zolmitriptan was found to be 7 sec. Release rate of drug was 97.54% within 10 minutes. FTIR studies showed good compatibility between drug and excipients.

Keywords: Zolmitriptan, croscarmellose sodium, polyplasdone XL, Explotab

8. INSULIN PLANT AID IN DIABETIS

B. Rani, B.Niharika ,R.Vaishnavi, B. Satish, K.Renuka , M.Nandini*
Unity college of Pharmacy ,Raigir ,Yadadri Bhongir¸

ABSTRACT

Costus igneus, commonly known as insulin plant in India, belongs to the family Costaceae. Consumption of the leaves are believed to lower blood glucose levels, and diabetics who consumed the leaves of this plant did report a fall in their blood glucose levels. Objectives: The present study was planned to evaluate the effect of the leaves of Costus igeus on dexamethasone-induced hyperglycemia in male Wistar rats. Four groups of male Wistar rats (n= 6) were treated with 10 mg/kg/day of dexamethasone subcutaneously for 20 days. From day 11 to day 20, different groups received 100, 250 or 500 mg/kg/day of powdered leaves of Costus igeus in distilled water orally or Glibenclamide 500 μg/kg orally. On the 20th day, after overnight fasting, a retro-orbital puncture was performed for obtaining blood samples to estimate the fasting blood glucose level, and the same procedure was followed on the other eye 1 hour after a glucose load of 2.5 g/kg orally for estimation of post-glucose load blood glucose levels. Fasting blood sugar and postglucose load blood sugar levels were raised in the group that received dexamethasone when compared to normal controls ($P < 0.001$), whereas 250 and

500 mg/kg powdered leaf of Costus igeus and Glibenclamide 500 µg/kg decreased the dexamethasone-induced hyperglycemia ($P < 0.01$). The leaves of Costus igeus reduced the fasting and postprandial blood sugar levels, bringing them towards normal, in dexamethasone-induced hyperglycemia in rats.

KEYWORDS :Costus igeus, hyperglycemia, insulin plant

9. Design and Development of Modified Release Solid Oral Dosage Form (Entacapone)

I.Rajeev, Ampati Srinivas
Unity college of Pharmacy ,Raigir ,Yadadri Bhongir

ABSTRACT

The present research work focuses on design and development of modified Release solid oral dosage form.entacapone: based on assessment of various parameters, in vitro drug dissolution profile and drug kinetics, hf14 was found to be optimized formulation. FT-IR & DSC studies revealed that there was no interaction between the drug and polymers used in the formulations. The drug release from hf14 was found to fit zero order of concentration independent and best fitted to higuchie model confirming to be diffusion assisted mechanism. Based on the mucoadhesive study, the optimized dosage form adhesive to gastro intestinal tract more than 12 hours. The marketed product released by first order kinetics by concentration dependent. In vivo bioavailability studies were conducted for optimized entacapone trilayer tablets and marketed product, the results were indicating that the optimized entacapone formulation was shown sustained release patterns where marketed product was shown immediate release

Keywords: Entacapone, modified drug release, trilayer

10. CORD BLOOD AS A SOURCE OF MEDICINE

B. Sadwika, M. Laxman, Y.Nikhil ,B.Prasanna, K.Ashritha, M.Nandini*,

ABSTRACT:

Cord blood is a sample of blood taken from a newborn baby's umbilical cord. It is a rich source of hematopoietic stem cells, which are precursors to body cells. Umbilical cord blood is a rich source of special blood cells called stem cells. These cells are the body‘s building blocks for blood, organs, tissue, and the immune system and are genetically unique to each baby. As such, they have been used to treat certain diseases of the blood and immune system. The next largest group is inherited diseases (of red blood cells, the immune system and certain metabolic abnormalities) Patients with lymphoma, myelodysplasia and severe aplastic anemia have also been successfully transplanted with cord blood.After the baby is born and before the placenta is delivered, the umbilical cord is clamped and cut, the same as it would be for any normal delivery. The cord is rigorously cleaned to ensure a sterile collection, and then the cord blood is collected by your healthcare professional. Preserving them "stops the clock" and protects the cells from aging and being exposed to environmental factors and common viruses that can decrease their function. Today, cord blood stem cells are used in the treatment of nearly 80 diseases, including a wide range of cancers, genetic diseases and blood disorders. When you bank your baby‘s cord blood, you preserve a unique biological resource that is like a self-repair kit‘ for your child and other possible family members

KEYWORDS: Bone marrow ,Cord blood , Hematopoietic stem cell transplantation ,Human leukocyte antigen,,Mesenchymal stem cells , Peripheral blood .

11. Manufacturing defects of tablets

Akifa Aiman, A. Sangeetha, M. Pravalika, P. Shireesha, Shravya, V. Pavani*
Unity College of Pharmacy, Raigiri,yadadri Bhongir, T.S

ABSTRACT

Tablet defects can come from any of the unit operation upstream and from the tablet press. The raw materials may be of poor quality or do not meet specification, causing excessive fines that lead to a host of defects. The formulation may be the source of defects if the material do not compress well or the processing step specified within the formulation fail to produce a powder a good flow, compressibility, and ejection properties. The processing and granulation of powder is often the source of defect. Every product behaves differently on a tablet press, even if it’s the same product run on a different day. The variation often stems from changes in the properties of the raw materials—active ingredients and excipients-from batch to batch. Naturally, the goal is to minimize these changes. Tablet press operators, however, don’t have any control over formulation and granulation. Tablet specifications are tight, and the list of possible defects is long: Variable weight, sticking, picking, capping, lamination, variable hardness, among others. This article focuses on these variations. It pinpoints the possible causes of these defects and offers advice on preventing and fixing the source of the problems. Key words: capping, mixing, granules, punches, compression, cracking

12. DISSOLUTION AND TYPES OF APPARATUS

G. Bhargavi, K.Sowmya, T. Divya, J. Tharun, K. Nikitha, V. Pavani*
Unity College of Pharmacy, Raigiri,yadadri Bhongir

ABSTRACT

In the pharmaceutical industry, dissolution study is one of the vital tests for the evaluation of the pharmaceutical dosage form. Dissolution test is the most important tool for the testing of drug release profile of solid dosage form in the pharmaceutical preparation. Dissolution studies provide the knowledge about the efficacy of the dosage form. Dissolution tests are major for performing a various kind of investigations like drug degradation profiles, stability and shelf life studies, chemical stability and so on. Dissolution test can be easily performed in both the small and large scale with the proper techniques and it is also used for the comparison between the graph profile of the similar and different dosage form. Hence, it can be considered as the most qualitative and convenient test for the evaluation of the pharmaceutical solid dosage form.

13. Diabetes mellitus

Mohammad asif, S. Pooja sri, CH. Chaithanya, Ankusha, Ashwitha, V. Pavani*
Unity College of Pharmacy, Raigiri,yadadri Bhongir, T.S

ABSTRACT:

Diabetes mellitus is a chronic heterogeneous metabolic disorder with complex pathogenesis. It is characterized by elevated blood glucose levels or hyperglycemia, which results from abnormalities in either insulin secretion or insulin action or both. Hyperglycemia manifests in various forms with a varied presentation and results in carbohydrate, fat, and protein metabolic dysfunctions. Long-term hyperglycemia often leads to various microvascular and macrovascular diabetic complications, which are mainly responsible for diabetes-associated morbidity and mortality. Hyperglycemia serves as the primary biomarker for the diagnosis of diabetes as well. In this review, we would be focusing on the classification of diabetes and its pathophysiology including that of its various types

KEY WORDS: Pathogenesis,Insulin,Diabetes

14. PREPATELLAR BURSITIS

MEGHANA, VARSHITHA, MAZID, P.NAGARAJU*,
Unity college of Pharmacy,
Raigir (V), Bhongir (M), YadadriBhuvanagiri (Dist), Telangana– 508116

Abstract

Bursitis is the swelling or inflammation of a synovium-lined sac-like structure called a bursa. These are found throughout the body near bony prominences and between bones, muscles, tendons, and ligaments. They function to reduce friction between these structures. Inflammation of the bursa around large joints like the shoulder, knee, hip, and elbow may prompt patient visits to healthcare providers. There are four major bursae associated with the knee joint: suprapatellar, infrapatellar, pes anserine, and prepatellar. This article will focus on the prepatellar bursa and, specifically, prepatellar bursitis. This bursa is present between the patella and the overlying subcutaneous tissue. It represents the most commonly affected bursae of the knee and the second most commonly affected bursa overall, following the olecranon bursa. The location makes it a target during repetitive kneeling and has led to it being colloquially referred to as housemaids, carpet layers, and carpenters knee.

15. ELECTROPHORESIS

NAVEEN NAYAK, ESHWAR, SHIRISHA, ASMA, P.NAGARAJU*
Unity college of Pharmacy,
Raigir (V), Bhongir (M), YadadriBhuvanagiri (Dist), Telangana– 508116

Abstract

Electrophoresis is a technique that enables separation and analysis of charged molecules in an electric field. Gel electrophoresis is most commonly used for separation and purification of proteins and nucleic acids that differ in size, charge, or conformation. The gel is composed of polyacrylamide or agarose. Agarose is appropriate for separating DNA fragments ranging in size from a few hundred base pairs to about 20 kb. Polyacrylamide is preferred for proteins and smaller DNA fragments. The mobility of DNA is constant under defined electrophoretic conditions. These conditions are characterized by the electrical parameters (current and voltage) and factors such as buffer composition, agarose concentration, and temperature.

16. TYPHOID

RAKESH, UDAYKIRAN, PALLAVI, TEJASWINI, P.NAGARAJU*,
Unity college of Pharmacy,
Raigir (V), Bhongir (M), YadadriBhuvanagiri (Dist), Telangana– 508116

Typhoid fever is a life-threatening infection of the intestinal tract and bloodstream, caused by the highly virulent bacteria *Salmonella Typhi*. It only lives in humans and is usually spread between humans through food or water which is contaminated with faeces. The incubation period ranges from 7-14 days on average, but can range from 3 days to two months. Symptoms include prolonged high fever, fatigue, headache, nausea, abdominal pain, constipation or diarrhea, and in some cases a rash. Severe cases may lead to serious complications or even death.

Typhoid fever is an important public health problem in many low and middle income countries, causing between 11 and 21 million cases and between 128,000 to 161,000 deaths each year. The majority of cases occur in South Asia, South-East Asia, and sub-Saharan Africa. The actual burden of typhoid fever in the Eastern Mediterranean Region of WHO remains unknown. In recent time, Pakistan experienced an extensive drug resistant typhoid fever outbreak

17. GASCHROMATOGRAPHY - MASS SPECTROSCOPHY

POOJA, SARITHA, MADHAVI AND S AMAR NATH*
Unity college of Pharmacy,
Raigir (V), Bhongir (M), YadadriBhuvanagiri (Dist), Telangana– 508116

ABSTRACT

GC –MS is an integrated composite analysis instrument combiningGC which is excellent in its separation with Mass spectroscopy ideal in identification and elucidate structure of separated component.

Gas chromatography leads to separation of volatile organic compounds.

Separation occurs as a result of unique equilibrium established between the solutes and the stationary phase. An inert carrier gas carries the solutes through the column. Mass spectrometry is a technique used for measuring the molecular weight and determining the molecular formula of an organic compound.

18. GREEN CHEMISTRY

B ARUNA, ANNAPURNA, AKHILA, CHANDHANA, AND S AMARNATH*
Unity college of Pharmacy,
Raigir (V), Bhongir (M), YadadriBhuvanagiri (Dist), Telangana - 508116

ABSTRACT

Meeting the needs of the present without compromising the ability of future generations to meet their own needs. The principles cover such concepts as: The design of processes to maximize the amount of raw material that ends up in the product, benign substances, including solvents. The design of energy efficient processes. The best from the waste disposal: not to create it in the first place.

19. PARKINSON'S DISEASE

DEEPA, ANAMIKA, KAVYA, PAVAN AND S AMAR NATH*
Unity college of Pharmacy,
Raigir (V), Bhongir (M), YadadriBhuvanagiri (Dist), Telangana - 508116

ABSTRACT

The disease first described by jamesparkinson in 1987.
Parkinson syndrome, idiopathic or primary Parkinson syndrome. Parkinsons disease is a chronic neurodegenerative disease associated with substantial morbidity, increased mortality, and high economic burden. Primary Motor Symptoms include: Primary motor symptoms, Secondary motor symptoms, Non motor symptoms. Pathogenesis involves Free Radicals and deflects in emergency, Programed cell death, Genetic factors. Environental factors. Protein aggregation, Aging, Drug induced Parkinsonism.

20. AMYOTROPHIC LATERAL SCLEROSIS – A REVIEW

A.PRIYANAKA

Abstract:

Amyotrophic Lateral Sclerosis (ALS) is a devastating neurodegenerative disease that attacks the motor neurons of the brain and spinal cord of a healthy adult. The disease progresses rapidly and is always fatal, leaving patients paralyzed and unable to breathe. There is still np known cause for the majority of the cases and no effective treatment or cure.

21. Reverse Phase High Performance Liquid Chromatographic Technique for the Determination of Pantoprazole in Pure and Its Dosage Forms

M.Chaithanya, Ampati Srinivas*
Unity College of Pharmacy

ABSTRACT

A rapid and precise reverse phase high performance liquid chromatographic method has been developed for the validated of Pantoprazole, in its pure form as well as in tablet dosage form. Chromatography was carried out on a Phenomenex Gemini C18 (4.6×250mm) 5µ column using a mixture of Methanol: TEA Buffer pH 4.0 (70:30 v/v) as the mobile phase at a flow rate of 1.0ml/min, the detection was carried out at 280nm. The retention time of the Pantoprazole was 2.302 ±0.02min respectively. The method produce linear responses in the concentration range of 10-50mg/ml of Pantoprazole.The method precision for the determination of assay was below 2.0%RSD. The method is useful in the quality control of bulk and pharmaceutical formulations.

Keywords: Pantoprazole, RP-HPLC, validation

22. FORMULATION AND EVALUATION OF NASAL INSITU GEL OF FLUOXETINE HYDROCHLORIDE

Amapti Srinivas, P.Goverdhan Reddy
Unity College of Pharmacy, Raigir, Bhongir, Yadadhri Bhuvanagiri, TS, 508116

Abstract:

Purpose of this study was to formulate and evaluate in-situ gel of Fluoxetine Hydrochloride for nasal delivery using polymers possessing in-situ gelling properties.Formulations containing carbopol and sodium alginate were prepared using poloxomer as copolymer.Formulations were liquid before administration and underwent rapid gelation upon oral administration.FT-IR studies of drug, polymer and their physical mixture were carried out. The result of these studies revealed that there are no definite changes obtained in the bands of drug with respect to pure drug. Hence it was confirmed that formulations do not have any drug polymer interactions.In order to evaluate rheological behavior, viscosity of the formulations was evaluated using Brookfield viscometer. It showed that viscosity was found to be decreased at increasing rpm exhibiting shear thinning behaviour and increase in viscosity was observed with increase in concentration of polymer indicating that it obeys Newtonian system.Invitro release of fluoxetine from formulations was carried out which will indicate the effects of the variables on the mechanism and kinetics of drug release from dosage form. For the present work, in-vitro diffusion studies were carried out in simulated nasal fluid.

Release kinetic studies showed that insitu gels followed zero order drug release mechanism. Korsmeyer-peppas ‘n’ value 0.96 indicated that the formulation followed non-fickian diffusion controlled release mechanism.

Keywords: insitu gel systems,Nasal drug delivery,Fluoxetine Hydrochloride.

23. DEVELOPMENT AND VALIDATION OF RP-HPLC METHOD FOR THE ESTIMATION OF AGOMELATINE IN BULK AND TABLET DOSAGE FORM

Amapti Srinivas, P.Goverdhan Reddy
Unity College of Pharmacy, Raigir, Bhongir, Yadadhri Bhuvanagiri, TS, 508116

ABSTRACT

Development an accurate, simple, precise and rapid method for the estimation of Agomelatine in bulk and Tablet dosage form. The method uses Reverse phase High performance Liquid Chromatography (RP-HPLC). PHENOMENEX Luna C18, (5µm, 250 x 4.6mm) column operated with a mixture of mixed phosphate buffer of pH 6 with ortho phosphoric acid and Acetonitrile(55:45) as mobile phase was found to be suitable for the estimation. The flow rate was maintained at 1ml/min. Detection was carried out at 230nm using a UV detector. The total run time was less than 10min the retention time of 2.7min for Agomelatine. Validation of the method was performed for precision, accuracy, linearty, ruggedness, specificity and sensitivity to confirm to the ICH guidelines for validation of an analytical method.

KEYWORDS: Agomelatine, RP-HPLC, Method development, Validation.

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24. SYNTHESIS AND DEVELOPMENT OF 1,2,4-TRIAZOLYL-BENZOXAZOLE DERIVATIVES AS NOVEL COX-2 INHIBITORS

S.Amarnath, Amapti Srinivas,
Unity College of Pharmacy, Raigir, Bhongir, Yadadhri Bhuvanagiri, TS, 508116

ABSTRACT

In the present research investigations we have synthesized a series of 2-(dialkylamino)-N-(5-(5-aryl-4-ureido-4H-1,2,4-triazol-3-yl)benzoxazol-2-yl) acetamides (Xa1-16).The newly synthesised derivatives were characterized by using the data of IR, 1 H NMR and Mass Spectral analysis. Thus synthesized and characterized targeted compounds were further screened for their *in vitro* COX-2 inhibition activity by using TMPD Assay method. The IC50 values of Compounds Xa 13, 14, 15 and 16 were found to be more potent COX-2 inhibitors comparable to that of standard refecoxib, remaining compounds were shown mild to moderate COX-2 inhibitory activity. Thus, this class of compounds apart from the ease of synthesis and higher yield may serve as excellent candidates for selective COX-2 inhibition analysis.

KEYWORDS: Novel benzoxazoles, COX-2 inhibitory activity, 1H NMR, Mass.

25. METHOD DEVELOPMENT AND VALIDATION OF DABIGATRAN ETEXILATE MESYLATE BY RP-HPLC METHOD AND ITS DEGRADATION STUDIES

S.Amarnath, Ampati Srinivas
Unity College of Pharmacy, Raigir, Bhongir, Yadadhri Bhuvanagiri, TS, 508116

ABSTRACT

A simple, precise, accurate, economical and reproducible RP-HPLC method for estimation of Dabigatran Etexilate Mesylate in capsule dosage form has been developed. Quantitative HPLC was performed with SHIMADZU LC 20ATwith Spin chrome Software with UV-Visible Detector (SPD-20A), PHENOMENEX Luna C18, 5µm, 250 x 4.6mm (size) column was used in the study. The mobile phase of Methanol: Water (70:30) used in this study. The conditions optimized were: flow rate (1.2 ml/minute), wavelength (230 nm) and run time was 10 min, column temperature was maintained at 500C. Retention time was found to be 4.60 min. The linearity was found to be in the concentration range of 0-25 □g/ml. The developed method was evaluated in the assay of commercially available capsules Paradaxa containing Dabigatran Etexilate Mesylate. The amount of drug in capsule was found to be 75mg. Results of analysis were validated statistically and by recovery studies. The recovery studies 96.67 % was indicative of the accuracy of proposed method. The precision was calculated as repeatability, inter and intraday variation (%RSD) for the drug. By using method, stability of the drug has been studied.

Key Words: HPLC, method validation, Dabigatran Etexilate Mesylate, precision, stability studies

26. Comparative Studies for Enhancement of the Dissolution Profile of Pitavastatin

Md.Ismail, P.Goverdhan Reddy
Unity College of Pharmacy, Raigir, Bhongir, Yadadhri Bhuvanagiri, TS, 508116

Abstract:

The main objective of the present study is to enhance the solubility, dissolution rate, bioavailability of water insoluble drug pitavastatin by liquisolid technology and solid dispersions. The liquisolid compacts were prepared by different ratios of polyethylene glycol 400 as a non volatile liquid vehicle, micro crystalline cellulose used as carrier material and colloidal silicon dioxide as coating material. Solid dispersions were prepared by different ratios (1:2, 1:4, 1:6, 1:8) of poly ethylene glycol 6000 as carrier. All these formulations were characterized for different physical parameters to comply with pharmacopoeial limits. *Invitro* dissolution profiles of liquisolid formulation, solid dispersions were studied and compared with that of pure pitavastatin tablet formulation in 0.1N HCL. It was found that liquisolid formulation tablets formulated with microcrystalline cellulose showed percentage drug release 63±2.42 at 5min and they showed significant higher drug release rates than pure drug 13±1.44 due to increase in wetting properties and

surface of drug available for dissolution. FTIR spectral studies showed that there is no interaction between the drug and excipients.

Key words:
Liquisolid technologies, solid dispersions, pitavastatin, PEG6000.

27. Formulation and Development of Modified Released Tablets Containing Metronidazole Loaded Microspheres

Md.Ismail, A.Priyanka
Unity College of Pharmacy, Raigir, Bhongir, Yadadhri Bhuvanagiri, TS, 508116

The main objective of present study is to formulate and evaluate Metronidazole colon specific tablets with the help of natural polysaccharides. To develop suitable formulation by optimizing the lag time of drug release in stomach and small intestine by formulating with suitable natural polysaccharides. To study the drug release pattern. Applying of kinetic models to the optimized formulation. Disssolution studies without caecum content for formulations F1-F11 were represented in tables ,they revealed that formulations (F1-F3) containing tamarind gum in different ratios showed drug release upto 95% in 12 hours. And formulations containing gum karaya (F4-F6) showed drug release upto 97% in 10 hours. Formulations containing locust bean gum (F7-F9), showed drug release 95% within 8 hours. And combination of both gums (tamarind gum and gum karaya) containing formulations showed drug release upto 97.8% within 20hrs. The same studies were conducted in dissolution medium containing rat caecum, they revealed that formulations (F1-F3) containing tamarind gum in different ratios showed drug release upto 93 to 96% within 11 hours.And formulations containing gum karaya (F4-F6) showed drug release upto 94 to 97% within 9 hours. formulations containing locust bean gum (F7-F9), showed drug release 92% to 98% within 7 hours and combination of both gums (tamarind gum and gum karaya) containing formulations showed drug release up to 97.8% within 12hrs(1:2), 96.5% within 16hrs(2:1). The optimized formulation F11 was subjected to various kinetic models such as Zero-order, First order, Higuchi order, Peppas model and Hixson-Crowell model.And drug release follows zero order according to their R^2 value (0.9093).

Key words: Disssolution, Peppas model, HPβCD and TPD-Z .

28. Formulation and Development of Fast Dissolving Tablets (FDTS) of Sumatriptan Succinate Using Simple and Cost Effective Technique

Md.Ismail, A.Priyanka
Unity College of Pharmacy, Raigir, Bhongir, Yadadhri Bhuvanagiri, TS, 508116

Abstract:

The basic need of this study is to develop an fast dissolving tablet of sumatriptan succinate used in the treatment of migrain ,with an aim of reduces the lag time and providing faster onset of action. Present investigation is to formulate fast dissolving tablets (FDTs) of sumatriptan using simple and cost effective technique. The tablets were prepared by direct compression method using superdisintegrants such as poly plasdone XL, polacrilin potassium, primogel,L-HPC and pregelatinized starch, with pearlitol SD 200 and Spraydried lactose as diluent. Improve the palatability of the drug with sweetening agent and flavor. Find out the suitable diluent and disintegrant combination, to formulate the fast dissolving tablets of sumatriptan succinate. Formulation (F14) with polyplasdone 5% was considered as the optimized fast dissolving tablets. It shows drug release of 92.00% of drug in 5 min and 98.17% in 10min. These results were comparable with the marketed product suminat-25. Based on the optimization results it is concluded that the objective of formulating fast dissolving tablets containing sumatriptan succinate was achieved by simple and cost effective technique.

Key words: Sumatriptan succinate, Primogel,L-HPC, Pearlitol SD 200 and Polacrilin potassium

29. Formulation and Development of Modified Released Tablets Containing Antibiotic Loaded Microspheres

Md.Ismail, P.Bhanupriya
Unity College of Pharmacy, Raigir, Bhongir, Yadadhri Bhuvanagiri, TS, 508116

The main objective of this work is to develop and explore a new formulation to enhance the bioavailability of a highly permeable and a poorly soluble antipsychotic drug Ziprasidone and NSAID Flurbiprofen Inclusion Complexes. From the literature, it was found that carrier like microcrystallinecellulose (Avicel101), disintegrating agents like sodiumstarchglycolate, Croscarmelose sodium, Cross povidone were used to prepare Drug cyclodextin Inclusion Complexed tablets. Ziprasidone and Flurbiprofen are being poorly water insoluble drugs can be made to improve bioavailability, if drug is released effectively and this is achieved by formulating drug as inlusion complexed tablets which was the rationale of the present study. Complexation technology is one of the promising approaches to increase drug release and is confirmed by the experimental results. When compared to TPD-Z , F11 and TPD-F , F23 showed greater than two times of % Drug Release in Inclusion complexed system. This may be due to the presence of HPβCD,As the drug complexed with HPβCD ,the surface of the drug exposed to the dissolution media was more, this is because the Inclusion complexed formulations after disintegrating in the media the drug molecules were suspended

as a molecular dispersion,thus the formulation might be showing the better drug release, due to the complexation of drug with HPβCD.

Key words: Microspheres, microcrystalline cellulose, HPβCD and TPD-Z .

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30. Antibacterial activity of *Jasminum grandiflorum* Linn leaves

I.Rajeev, P.Goverdhan Reddy
Unity College of Pharmacy, Raigir, Bhongir, Yadadhri Bhuvanagiri, TS, 508116

Extracts of *Jasminum grandiflorum* Linn (Oleaceae) were screened for their *in vitro* antibacterial activity by agar diffusion method in comparison with standard antibiotic penicillin. The antibacterial activity of petroleum ether, chloroform, acetone, methanol and aqueous extract of leaves of the plant were studied using *Staphylococcus aureus*, *Bacillus subtilis, Escherichia coli* and *Pseudomonas aeruginosa* as test organism. Out of all extracts tested, petroleum ether, methanol and aqueous extracts were effective against all the four microorganisms.
Chloroform extract was only effective against *Bacillus subtilis* and *Pseudomonas aeruginosa.* Acetone extract was most effective against *Pseudomonas aeruginosa* and *Escherichia coli.* Keywords: *Jasminum grandiflorum* Linn, *Staphylococcus aureus, Bacillus subtilis, Escherichia coli, Pseudomonas aeruginosa, in vitro* antibacterial activity.

31. JASMINUM GRANDIFLORUM LINN

I.Rajeev, P.Goverdhan Reddy
Unity College of Pharmacy, Raigir, Bhongir, Yadadhri Bhuvanagiri, TS, 508116

ABSTRACT:

Plants form the basis of human and animal life. Plants are better choice for medicinal applications when compared to synthetic chemicals and the nature has provided various types of medicinal plants. *Jasminum grandiflorum* Linn. (family Oleaceae) is a night bloomy flowering plant and is an important source of methyl jasmonates which find utility in plant defense, fruit ripening, plant growth senescence and other physical processes. The aroma plant *Jasminum grandiflorum* Linn. is native to tropical and warm temperate regions and the plant is observed to have favorable properties which can be used to treat numerous ailments. The leaves of the plant find clinical use in Ayurveda for wound management. The flowers of the plant are used to adorn the women coiffure. In this article, an attempt has been made to provide an updated review on this plant with focus on the isolation and quantification of chemical constituents, medicinal potential and patents on the medicinal and cosmetic formulations comprising *Jasminum grandiflorum* Linn.

32. DEVELOPMENT AND VALIDATION OF A RP-HPLC METHOD FOR ESTIMATION OF LAMOTRIGINE IN A TABLET DOSAGE FORM

M.Nandini, M.Chaithanya
Unity College of Pharmacy, Raigir, Bhongir, Yadadhri Bhuvanagiri, TS, 508116

ABSTRACT

A simple, sensitive, and precise high performance liquid chromatographic method for the analysis of Lamotrigine has been developed and validated for the determination of compound in commercial pharmaceutical products. The compounds were well separated on BDS Hypersil C18 reverse phase column by the use of a mobile phase of mixed phosphate buffer and acetonitrile in a ratio of 40:60 v/v, at a flow rate of 1.0 ml/min with detection wavelength at 248nm. The method was validated in terms of linearity, precision, accuracy, and specificity, robustness and solution stability. The method does require only 10 minutes as runtime for analysis which prove the adoptability of the method for the routine quality control analysis of the drug.

Key words: Lamotrigine , RP-HPLC.

33. A New Rp-Hplc Method Develop A New Rp-Hplc Method Development And Validation For Simultaneous Estimation Of Pyridoxine Hydrochloride And Doxylamine Succinate In Bulk Drug And Pharmaceutical Tablet Dosage Form.

M.Nandini, M.Chaithanya
Unity College of Pharmacy, Raigir, Bhongir, Yadadhri Bhuvanagiri, TS, 508116

Abstract:

The Present work was to develop a simple, fast, accurate, precise, reproducible, reverse phase high performance liquid chromatographic method for simultaneous estimation of pyridoxine hydrochloride and doxylamine succinate in pharmaceutical tablet dosage form marketed as doxinate. Chromatographic separation was done using Inertsil ODS RP C18 column having dimension of 4.6×250mm having particle size of 5µm, with mobile phase consisting of phosphate buffer pH 3 ±0.02 pH adjusted with ortho phosphoric acid and acetonitril (50:50 %v/v), flow rate was adjusted to 1.0 ml/min and detection wavelength at 263nm. The retention times of pyridoxine hydrochloride and doxylamine succinate was found to be 2.35 and 4.80min. The Proposed method has been validated for accuracy, precision, linearity, range and robustness were within the acceptance limit according to ICH guidelines. Linearity for pyridoxine hydrochloride and doxylamine succinate was found in range of 25µg-150µg and correlation coefficient was found to be 0.999 and 0.999, %RSD for method precision was found to be 0.76, 0.82 and for system precision was 0.80 and 0.71 respectively, % mean recovery for pyridoxine hydrochloride and doxylamine succinate was found to be 99.18% to 99.48%. The method was found to be robust even by change in the mobile phase ±5% and in less flow condition. The developed method can be successfully employed for the routine analysis of pyridoxine hydrochloride and doxylamine succinate in API and Pharmaceutical dosage forms.

Keywords: Pyridoxine hydrochloride and Doxylamine succinate, RP-HPLC, Method development, Method validation.

34. METHOD DEVELOPMENT AND VALIDATION OF CAPTOPRIL BY USING RP-HPLC

M.Nandini, S.Amarnath
Unity College of Pharmacy, Raigir, Bhongir, Yadadhri Bhuvanagiri, TS, 508116

ABSTRACT

An isocratic reversed phase high-performance liquid chromatographic (RP-HPLC) method has been developed for the determination of captopril in API, dosage formulations and human serum. Chromatographic separation was achieved on SYMMETRY C18 150X4.6mm,3.7μm and columns using mobile phase, methanol: water (70:30 v/v) adjusted to pH 3.0 via phosphoric acid 85% having flow rate of 1.0 mL min -1 at ambient temperature with detector set at 272 nm. Calibration curves were linear over range of 5-25 μg mL -1 with a correlation coefficient ± 0.999. LOD and LOQ were in the ranges of 0.4-2.3 μg mL -1. Intra and inter-run precision and accuracy results were 98.0 to 102%.

KEYWORDS: Captopril, Diuretics, RP-HPLC.

35. Formulation Development and *in vitro* Evaluation of Escitalopram Immediate Release Tablets

Swathi A, Goverdhan Reddy P, Prasad G, Srinivas A and Ismail MD*
Unity College of Pharmacy, Raigir, Bhongir, Yadadhri Bhuvanagiri, TS, India.

Abstract

The aim of this study is to formulate and significantly improve the bioavailability and reduce the side effects of immediate release tablets Escitalopram. The precompression blends of Escitalopram were characterized with respect to angle of repose, bulk density, tapped density, Carr's index and Hausner's ratio. The precompression blend of all the batches indicates good to fair flow ability and compressibility. Immediate release tablets were prepared with various polymers like PEG 6000, Croscarmellose sodium and Sodium-starch glycolate at different concentration ratios and were compressed into tablets. The formulated tablets were evaluated for various quality control parameters. The tablets were passed all tests. Among all the formulations F7 formulation containing, drug and Croscarmellose sodium showed good result that is 98.12 % in 45 min. Hence from the dissolution data it was evident that F7 formulation is the better formulation. By conducting further studies like *invitro* studies.

Keywords
Escitalopram, PEG 6000, Croscarmellose sodium and Sodium-starch glycolate, Immediate release.

36. Formulation Design, Development of Gastro Retentive Floating Tablets of Propranolol

Goverdhan Reddy P, Prasad G, Srinivas A and Ismail MD*
Unity College of Pharmacy, Raigir, Bhongir, Yadadhri Bhuvanagiri, TS, India.

Aim: The present research work was carried out by formulate and evaluate the gastro-retentive floating tablets of propranolol. Materials and Methods: Propranolol HCl is an antihypertensive agent. It is mainly used in the treatment of acute myocardial infarctions. Consequently, the current exploration was to design a gastro-retentive drug delivery system of propranolol using swelling polymer through wet granulation method. All the formulations were evaluated for weight variation, hardness, friability, drug content, and *in-vitro* dissolution. In this gastro-retentive dosage form using hydroxypropylmethylcellulose-K4M (HPMC-K4M) was prepared to develop a sustain release tablets, which could retain in the stomach for longer periods of time delivering the drug to the site of action that is in the stomach. Statistical Analysis used: Fourier-transform infrared signifying compatibility of the drug and polymers in the tablet composition. Results: Pre- and Post-compression parameters of all the formulations were within the pharmacopoeial limits and *in-vitro* drug release of F2 formulation was found to be 99.14% in 12 h. Conclusion: Dissolution studies of the composition, it was concluded that the formulation F2 which is containing 50 mg of HPMC-K4M, 25 mg of sodium bicarbonate, 25 mg of polyvinylpyrrolidone K30, 1.5 mg of magnesium stearate, and 1.5 mg of Talc is the best formulation. F2 possessed quick buoyancy lag time of 40 s and good total floating time of 12 h. As the consequence of this study, it may accomplish that the floating tablets using HPMC-K4M are a hydrophilic polymer increases the gross register tonnage of the dissolution fluid in the stomach to deliver the drug in a sustained manner.

Key words: Gastro retentive drug delivery system, hydroxypropylmethylcellulose-K4M, propranolol, wet granulation

37. FORMULATION DESIGN AND DEVELOPMENT OF ZOLMITRIPTAN ODT

Mary, Shravya, Md.Ismaial
Unity College of Pharmacy, Raigir, Bhongir, Yadadhri Bhuvanagiri, TS, India.

ABSTRACT

Zolmitriptan is a Selective Serotonin receptor agonist. Used in the acute treatment of Migraine attacks with or without aura and headaches.

The current research work is aimed at evolving a formulate and evaluate of a Rapid dispersible tablet dosage form of Zolmitriptan. Who have little or no access to water are also good candidates for orodispersible.Direct Compression technique was employ for combination of pure drug and excipients in the given ratio as an eight compositions. The primed powder blend was then compressed into tablets by the required Superdisintegrants (SSG, CCS and CP) and Polymers. The tablets be evaluate for hardness, thickness, weight variation, friability, Drug Content and Disintegrating Time (Sec) were subjected to a 7 minutes in-vitro drug release

studies (USP dissolution rate test apparatus II, 50 rpm, 370C ±0.50C) using phosphate buffer, pH 6.8 as a dissolution medium (900ml). The quantity of Zolmitriptan released from the tablet compositions at dissimilar time intervals is predictable by means of a UV spectroscopy method. The compositions that showed a considerable retardation of the drug release are considered promising. Among the eight compositions, F5 formulation contains Drug to Croscaramellose Sodium (CCS) in ratio 1:2 is optimized based on its ability to till 5 mins of in-vitro dissolution time and its cumulative % drug release was found to be 99.24 %.

KEYWORDS: Direct Compression technique, Zolmitriptan, Croscaramellose Sodium.

38. EVALUATION OFANTIHYPERLIPIDEMIC AND ANTIOXIDANT ACTIVITY OF INULA RACEMOSA ROOTS

R.Pruthvi, I.Rajeev
Unity College of Pharmacy, Raigir, Bhongir, Yadadhri Bhuvanagiri, TS, India.

The potential of Inula racemosa roots on hyperlipidaemia and oxidative stress was investigated in diet induced hyperliperlipidaemia model, In vivo and In vitro antioxidant parameters. Hyperlipidemia is induced by mixing rat feed with cholesterol and saturated fats for 28 d. Serum was withdrawn on 7th, 14th, 21st and 28th d. Seperated serum was analysed for Cholesterol (CH), Triglycerides (TG), HDL, LDL, Glucose, Aspartate aminotranferase (AST), Alanine aminotransferase (ALT) and Bilirubin. On 28th d liver was isolated and analysed for In vivo and In vitro antioxidant parameters. Oral administration of Inula racemosa for 28 d resulted in significant ($P<0.05$) reduction of cholesterol, triglycerides, LDL, Glucose AST, ALT, Bilirubin and increase in HDLlevels. The elicited effects were compared with standard drug, atorvostatin (10 mg/kg). The plant also displayed significantly ($P<0.01$) elevated Catalase and Glutathione levels and lowered LPO, NO and DPPH levels. The experimental results conferred significant ($P<0.01$) antihyperlipidemic activity of Inula racemosa in experimentally induced hyperlipidemia model and antioxidant activity. On the basis of present findings it can be concluded that Inula racemosa roots possess antihyperlipidaemic activity and antioxidant activity.

39. ANALYTICAL METHOD DEVELOPMENT AND VALIDATION OF FELODIPINE IN BULK AND TABLET DOSAGE FORM BY USING RP-HPLC TECHNIQUES

M.Nandini, S.Amarnath, Ampati Srinivas
Unity College of Pharmacy, Raigir, Bhongir, Yadadhri Bhuvanagiri, TS, India

Abstract:

This paper describes the analytical method suitable for validation of Felodipine by reversed Phase High Performance Liquid Chromatography (RP-HPLC) method. The method utilized RP-HPLC (Water 2695 with PDA detector) model and a column ODS C18 (4.6 x 150mm, 5□m). The mobile phases were comprised with Acetonitrile and Water (80:20 V/V) at a flow rate of 1.0 ml/min. UV detection at 305 nm MTS were eluted with retention times of 3.155min. The method was continued and

validated accordance with ICH guidelines. Validation revealed the method is rapid, specific, accurate, precise, reliable, and reproducible. Calibration curve plots were linear over the concentration ranges 15-75 µg/mL ($R2 = 0.9998$). Limit of detection (LOD) was 0.19µg/ml and limit of quantification (LOQ) was 0.6µg/mL. The method showed good recoveries (98.9 - 100.4%). Statistical analysis was proves the method is suitable for the analysis of Felodipine as a bulk, in tablet dosage form without any interference from the excipients. It was also proved study for degradation kinetics. It may be extended for its estimation in plasma and other biological fluids.
Keywords: Felodipine, RP-HPLC, Method Development and Validation.

40. FORMULATION DESIGN, DEVELOPMENT AND EVALUATION OF GRDDS OF ETODOLAC BY USING NATURAL POLYMERS

Ismail.Md, P.Goverdhan Reddy
Unity College of Pharmacy, Raigir, Bhongir, Yadadhri Bhuvanagiri, TS, India

ABSTRACT

Etodolac is used to relieve pain from various conditions. It also reduces pain, swelling, and joint stiffness from arthritis. This medication is known as a non steroidal anti inflammatory drug (NSAID). Hence the current study was to intend a floating delivery system of Etodolac by using natural polymers by Direct Compression method. All the composition was evaluated for hardness, friability, disintegration time and dissolution. The tablets which are disintegrated were discarded. The tablets which were able to float were further evaluated. In this gastro retentive dosage form using Xanthan gum, Guar gum and Pectin was prepared to develop a prolonged release tablets, that could retain in the stomach for longer periods of time delivering drug to the site of action that is in the stomach. In-vitro dissolution studies of the formulations, it was concluded that the formulation F-3 which containing 150 mg of Xanthan gum, 85mg of $NaHCO_3$, 9 mg of Mg. stearate, 9mg of Talc and Quantity sufficient of micro crystalline cellulose is the optimized formulation. Among all the formulation F-3 is prepared with Xanthan gum in Drug: Polymer ratio of 1:0.5. F-3 exhibited 98.67±0.25% of drug release within 12 hours. As the result of this study it may fulfilled that the floating tablets using Xanthan gum is a natural polymer increases the GRT of the dissolution fluid in the stomach to deliver the drug in a persistent manner. The concept of formulating floating tablets of model drug offers a suitable and practical approach in serving preferred objectives of gastro retentive floating tablets.

Key words: Etodolac, Floating Tablets, Natural Polymers.

41. Formulation design and development of Orodispersible tablets of Levetiracetam

Ismail.Md, P.Goverdhan Reddy, G.Prasad
Unity College of Pharmacy, Raigir, Bhongir, Yadadhri Bhuvanagiri, TS, India

Levetiracetam is a medication used to treat epilepsy. It is used for partial onset, myoclonic or tonic clonic Seizures. It works by decreasing abnormal excitement in the brain. The Current research work is aimed at developing a formulate and evaluate of an orodispersible tablet dosage form of Levetiracetam. The target of these new oral dissolving/disintegrating dosage forms have generally been pediatric, geriatric, bedridden and developmentally disabled patients and also patients with persistent nausea, who are in traveling, or who have little or no access to water are also good candidates for ODTs Direct Compression method was employed for blending of drug with polymers in the given ratio as a Nine formulations. The prepared powder blends were then compressed into tablets using the necessary Superdisintegrants (CP, SSG and CCS) and Excipients. The tablets were evaluated for Weight variation, thickness, hardness, friability, Drug Content and Disintegrating Time (Sec) were subjected to a 20 minutes *in vitro* drug release studies (USP dissolution rate test apparatus II, 50 rpm, 370C ±0.50C) using phosphate buffer, pH 6.8 as a dissolution medium (900ml). The amount of Levetiracetam released from the tablet formulations at different time intervals was estimated using a UV spectroscopy method. The formulations that showed a considerable retardation of the drug release are considered promising. Among the nine formulations, F5 formulation containing Drug to Sodium Starch Glycollate (SSG) and Cross Povidone (CP) is optimized based on its ability to till 10 minutes of *in-vitro* dissolution time, and its Cumulative % drug release of the 99.82±0.37% of dissolution study.

KEY WORDS: Levetiracetam, Orodispersible Tablets, Sodium Starch Glycollate, Cross Povidone.

42. The Constantly Highly Expression of Limbal Stromal Cells Compared to the Bone Marrow Mesenchymal Stromal Cells, Adipose-Derived Mesenchymal Stromal Cells and Foreskin Fibroblasts

Ampati Srinivas,KokkulaPavan Kumar
Unity College of Pharmacy, Raigir, Bhongir, Yadadhri Bhuvanagiri, TS, India

Limbal epithelial stem cells (LESC) have great potential in treating the blindness caused by corneal damage. LESC are maintained in stem cell niche called Palisade of Vogt. Limbal stromal (LS) cells are critical component of LESC niche and help in their self renewal. These cells resemble mesenchymal stromal/stem cells with multilineage differentiation potential. However little is known about their gene expression profile compared to MSC derived from various sources..

Keywords: limbal stromal cells; bone marrow mesenchymal stromal cells; adipose mesenchymal stem cells; gene expression profiling; microarray;limbal epithelial stem cells

43. Subcutaneous DL Technique Has Proven To Be an Adequate Host for Human Embryonic Stem Cells

Ampati Srinivas and Prasad Garrepally
Unity College of Pharmacy, Raigir, Bhongir, Yadadhri Bhuvanagiri, TS, India

Islet transplantation has become an important treatment modality for Type 1 Diabetes Mellitus (T1DM); nonetheless, the procedure may be limited by donor availability. An alternative has been the increasing use of cellular therapies derived from human Embryonic Stem Cells (hESC), showing very promising results in maturation, yield and ultimately, in insulin secretion in response to adequate stimuli. We recently developed a new technique for cellular transplantation under the skin. This manuscript evaluates the capabilities of the pre-vascularized Device-Less (DL) site to allow transplantation of Pancreatic Endoderm (PE) cells differentiated from hESC to treat diabetes mellitus. Fifty immunodeficient mice, n = 25 diabetic and n = 25 non-diabetic, were transplanted with PE cells. Animals were followed for 22 weeks and grafts were retrieved to evaluate engraftment and subsequent maturation. Diabetic mice showed slightly better engraftment (48% vs. 36%, p = 0.19) and secreted higher concentration of human C-peptide upon glucose stimulation (0.32 ± 0.15 ng/mL vs. 0.13 ± 0.09 ng/mL, p = 0.30), although differences were not significant. This maturation was not sufficient to successfully reverse diabetes. Monomorphic cystic changes were detected in 12% and 8%, respectively (diabetics vs. non-diabetics, p = 0.32) and all grafts seemed to be adequately contained by the surrounding collagen wall within the DL space. Our findings support the capabilities of the DL site to host PE cells and allow safe maturation as a new strategy to treat diabetes.

Keywords: islet Transplantation; embryonic stem cells; cell engraftment; cell maturation

44. Novel Spectrophotometric Method Development for the Estimation of Boceprevir in Bulk and in Pharmaceutical Formulations

Goverdhan Reddy P, Md.Ismail, Prasad Garrepally
Unity College of Pharmacy, Raigir, Bhongir, Yadadhri Bhuvanagiri, TS, India

ABSTRACT:

A New, Simple, Rapid and economical extractive spectrophotometric methods were developed for the determination of Boceprevir (anti-retroviral drug). Boceprevir is a direct acting protease inhibitor for the treatment of hepatitis C. It also has two isomers in which the S isomer is more active than the R-isomer. The methods were based on the formation of color chromogens with Bromo cresol green, Bromo thymol blue, Bromo phenol blue and Methyl orange indicator. The extractive spectrophotometry was carried out with phthalate buffer and chloroform. The absorbances of the chromogens were measured at 410 nm and 415 nm against the corresponding reagent blank. The proposed methods have been successfully applied to the bulk drug. The method has been statistically evaluated and was found to be precise and accurate.

KEYWORDS: Anti-hepatitis, Anti-HIV, Chromogen, Boceprevir, Extractive spectrophotometry, Victerelis

45. Design, synthesis and biological evaluation of 5-[2(3)-dialkylamino alkoxy] indole 2,3-diones as new antihistamine agents

T.Soujanya, S.Amarnath, Ampati Srinivas
Unity College of Pharmacy, Raigir, Bhongir, Yadadhri Bhuvanagiri, TS, India

Abstract

In the present work, some new 5-[2(3)-dialkylamino alkoxy] Indole 2, 3-diones were prepared from 5-hydroxy isatin. A mixture of 5-hydroxy isatin, dialkylamino alkylhalide in alcoholic potassium hydroxide was stirred at room temperature for 6 hours to get the 5-[2(3)-dialkylamino alkoxy] Indole 2,3-diones. The structures of the products were characterized by IR, NMR, MASS Spectral studies. All the compounds were evaluated for Antihistaminic activity by Histamine chamber method.

Key words: Synthesis, 5-[2(3)-dialky amino alkoxy] indole 2, 3-diones, antihistaminic activity.

46. Antihyperglycemic Effects of *Bombax malabaricum* Extracts in Alloxan-Induced Diabetic Rats

R.Pruthvi,, Ampati Srinivas, Immadi Rajeev
Unity College of Pharmacy, Raigir, Bhongir, Yadadhri Bhuvanagiri, TS, India

ABSTRACT

Bombax Malabaricum is a medicinal shrub used in conventional therapy for a number of diseases including diabetes mellitus. The aim of the present study was to investigate the antihyperglycemic effects of aqueous and ethanol extracts of Bombax Malabaricum in alloxan induced diabetic and normal rats. Rats were administered 100 and 200 mg/kg of aqueous and ethanol bark extracts and 20 mg/kg glibenclamide po. The doses applied caused no acute toxicity or behavioral changes in study animals. Blood glucose was determined at 0, 1, 3 and 5 h (normal rats) and on days 0, 1, 3 and 5 (diabetic rats) after treatment. Various doses of extracts significantly ($p \leq 0.05$) reduced the level of hyperglycemia in both normal and alloxan induced diabetic rats. The effects of ethanol extracts on glucose tolerance tests were significant (p≤0.05) and the hypoglycemic effects were pronounced from 30 to 180 min after treatment.

Key words: Bombax Malabaricum, diabetes mellitus, extract, hypoglycemic.

47. DISSOLUTION ENHANCEMENT OF A POORLY WATER SOLUBLE DRUG USING WATER SOLUBLE CARRIERS

Md.Ismail, G.Prasad
Unity College of Pharmacy, Raigir, Bhongir, Yadadhri Bhuvanagiri, TS, India

Role of various water-soluble carriers was studied for dissolution enhancement of a poorly soluble drug, famotidine, using solid dispersion approach. Carriers like urea, mannitol and sorbitol were used for this purpose. Characterization of the solid dispersions using FTIR and DSC techniques revealed distinct loss of drug crystallinity in the formulation, accounting for enhancement in dissolution rate. All the prepared solid dispersions showed dissolution improvement when compared with the pure drug to varying degrees. Among the carriers used urea showed better improvement in dissolution when compared with mannitol and sorbitol.

Keywords: Famotidine, Carrier, Solid dispersion, Characterization, Dissolution enhancement.

48. Design, Synthesis and Biological Evaluation of Methyl-2-(2-(Arylideneamino) Oxazol-4- Ylamino) Benzoxazole-5-Carboxylate Derivatives as New Antiinflammatory Agents

T.Soujanya, S.Amarnath, Ampati Srinivas
Unity College of Pharmacy, Raigir, Bhongir, Yadadhri Bhuvanagiri, TS, India

ABSTRACT:

A series of novel methyl-2-(arylideneamino)oxazol-4ylamino)benzoxazole-5-carboxylate derivatives synthesized. The structures of these compounds were established by IR, 1H NMR, 13C NMR, Mass spectral data and elemental analysis. Compounds were evaluated for their anti-inflammatory activity. Derivatives VIId and VIIe exhibited very good and almost equal anti-inflammatory activity in carrageenan-induced rat paw edema method compared with the standard drug Diclofenac Sodium.

KEYWORDS: Benzoxazole derivatives, IR, 1H NMR and Mass spectroscopy, methyl-2- (arylideneamino)oxazol- 4ylamino) benzoxazole -5-carboxylate and anti inflammatory.

49. Synthesis and Anti-Inflammatory Activity of a Novel Series of Diphenyl-1,2,4-triazoles and Related Derivatives

T.Soujanya, S.Amarnath
Unity College of Pharmacy, Raigir, Bhongir, Yadadhri Bhuvanagiri, TS, India

Abstract:

In the present investigation we have synthesized a series of new 1-[3-(4-substitutedphenyl)-5-phenyl-4H-1,2,4-triazol-4-yl] urea and 1-[3-(4-substitutedphenyl) -5-phenyl-4H-1,2,4-triazol-4-yl]thiourea derivatives **(4Ia - 4IId)**. The newly synthesised derivatives were characterized by using the data of IR, 1H NMR and Mass Spectral analysis. Thus synthesised and characterized targetted compounds were further screened for their anti-inflammatory activity by using Carrageenan – induced paw edema rat model. Among all the newly synthesized derivatives, Compounds **4Ia-4Ic** and Compounds **4IIa-4IId** were reduced the inflammation very significantly ($p<0.0001$), thus these compounds showed promising anti-inflammatory activity and only one compound (**4Id)** showed moderate anti-inflammatory activity ($p<0.05$).

Keywords: 1,2,4-triazoles, IR, 1 H NMR, Mass Spectroscopy and anti-inflammatory activity.

50. EVALUATION OF FLOWERS OF *JASMINUM OFFICINALE* FOR ANTIBACTERIAL ACTIVITY

I.Rajeev, S.Amarnath, Ampati Srinivas
Unity College of Pharmacy, Raigir, Bhongir, Yadadhri Bhuvanagiri, TS, India

Abstract:

Jasminum officinale belongs to the family Oleaceae has been investigated for many pharmacological actions. Literature reports suggests that the Jasminum officinale can be used in mental depression, impotence, nervous tension, menstrual disorders and Jasminum officinale used as analgesic, antispasmodic, galactogogue etc,. Our objective of the present study is to evaluate the flowers of Jasminum officinale for antimicrobial activity. The antifungal activity has been studied against Candida albicans and Aspergillus niger by Agar Cup Plate method, and antibacterial has been studied against Pseudomonas aeruginosa, Staphylococcus aureus, Klebsiella pneumoniae, Bacillus pumilis, P. vulgaris and E.coli by Cup Plate method. n- butanol and chloroform extracts displayed a good antibacterial and antifungal activity.

Key words: Jasminum officinale n-butanol extract, chloroform extract, n-hexane extract, antibacterial activity, antifungal activity

Cape Comorin Publisher
Kanyakumari, Tamilnadu, India
www.capecomorinpublisher.com

ISBN 978-93-94510-29-6
9 789394 510296